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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/601,927

06/23/2003

Yasuhito Miyata

78731

8015

22242 7590 02/27/2007  
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EXAMINER

FREEDMAN, LAURA BETH

ART UNIT

PAPER NUMBER

3616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/27/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/601,927

Applicant(s)

MIYATA, YASUHIITO

Examiner

Laura B. Freedman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-13, 15-22 and 24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3, 5-12, 15 and 24 is/are allowed.
- 6) ☒ Claim(s) 13, 16, 17 and 19-22 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 27 December 2006 has been entered.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 13, 16, 17, and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosono et al.(6,007,090) in view of Amamori (6,832,780). Hosono et al. disclose an airbag apparatus (for example, including #M) and motorcycle combination (best seen in figure 1) comprising:

- Body of the motorcycle including front (including #Wf) and rear (including #Wr) wheels and a seat (including #5) for a rider (including #R) spaced rearward of the front wheel

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- Retainer (including #10, 12, 15) having front and rear sides (for example, front is to the left and rear is to the right in figure 3)
- Airbag (including #14) able to be deployed from the retainer forwardly of the seat (best seen in figures 7, 8) and able to be inflated in a direction generally away from the retainer toward a distal end portion (for example, upper portion of airbag in figure 7) of the airbag
- Greater size of the inflated airbag in the upward direction (can be seen in figure 7) restraining the rider during a pitching motion of the motorcycle during a frontal collision (restrains the rider during various types of collision events)
- Inflated airbag has a rear portion (for example, right side in figure 7) that is adjacent and facing the rider and a front portion (for example, left side in figure 7) that is spaced forwardly therefrom and facing away from the rider (best seen in figure 7)
- Airbag stowed in the retainer (best seen in figure 3), the retainer positioned to allow the airbag to inflate upwardly, forwardly, and rearwardly (best seen in figures 7, 8)

Hosono et al. do not disclose a direction control member.

Amamori teaches an airbag apparatus (including #1) for a vehicle having front (not shown) and rear (not shown) wheels and a seat (not shown) for a rider (for example, occupant seen in figure 1) spaced rearward of the front wheel (occupant would be located in between seat and front wheel), the airbag apparatus comprising:

- Retainer (including #10) having front and rear sides (for example, front is to the left and rear is to the right in figure 1)

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- Airbag (including #1) able to be deployed from the retainer forwardly of the seat (best seen in figure 1) and able to be inflated in a direction generally away from the retainer toward a distal end portion (for example, upper portion of airbag in figure 1) of the airbag
- Direction control member (including #6) arranged in the airbag and able to optimize airbag inflation in a predetermined, upward primary inflation direction (best seen in figure 1)
- Plurality of connections (including front and rear connections of control member #6 to airbag #1) between the control member and the airbag at predetermined positions on the airbag and spaced from the retainer upon airbag inflation such that the direction control member and the connections restrict inflation of the airbag in a controlled direction (for example, front to rear direction) that is generally aligned with forward movement of the rider caused by frontal collisions
- Size of the inflated airbag is substantially less in the control direction than in the upward primary inflation direction that is transverse to the controlled direction (best seen in figure 1) and able to minimize time for airbag inflation in the upward primary inflation direction with the greater size of the inflated airbag in the upward direction restraining the rider during frontal collisions
- Inflated airbag has a rear portion (for example, right side in figure 1) that is adjacent and facing the rider and a front portion (for example, left side in figure 1) that is spaced forwardly therefrom and facing away from the rider,

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- the plurality of connections generally disposed at the front and rear portions of the airbag and able to restrict size of the inflated airbag therebetween (best seen in figure 1)
- Front and rear connections are spaced from the corresponding front and rear sides of the retainer such that the front connection and the retainer front side are spaced approximately equal to the spacing between the rear connection and the retainer rear side (best seen in figure 1)
  - An area between the direction control member and the retainer is larger than an area between the direction control member and the distal end portion of the airbag (can be seen in figure 1)
  - The plurality of connection including a generally upper connection (any of the connections), beyond which the airbag extends upon inflation (best seen in figure 1)
  - Airbag stowed in the retainer (not shown in stowed state, but airbag would be located in retainer/housing #10 with releasable lid #14 covering the airbag module), the retainer positioned to allow the airbag to inflate upwardly, forwardly, and rearwardly (best seen in figure 1), and the predetermined positions of connections between the control member (including #6) and the airbag (including #1) cause the primary inflation direction to be in a generally upward direction so that size of the inflated airbag is maximized in the upward direction and restricted in the controlled forward and rearward direction (best seen in figure 1)

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- First end (either left or right end in figure 1) of the direction control member connected to the airbag and spaced a first predetermined distance from the retainer upon inflation such that the first end is closer to the airbag distal end portion than to the retainer (best seen in figure 1)
- Second end (either right or left end in figure 1) of the direction control member connected to the airbag and spaced a second predetermined distance from the retainer upon inflation of airbag that is approximately equal to the first predetermined distance, such that the second end is closer to the airbag distal end portion than to the retainer (best seen in figure 1)
- Direction control member comprising a tether (including #6) able to connect generally opposing portions (front and rear) of the airbag and restricts inflation size of the airbag between the generally opposing portions (best seen in figure 1)
- Third end (for example, end of additional tether component that is connected to right side of airbag at a point closer to the top of the airbag than the generally horizontal tether component, as seen in figure 1) of the direction control member being spaced a third distance from the retainer that is greater than the predetermined distances of the first and second ends (right and left ends of the generally horizontal tether component) from the retainer (best seen in figure 1)

It would have been obvious to one skilled in the art at the time that the invention was made to modify the airbag apparatus of Hosono et al. such that it comprised

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inflation control device, or direction control member, as claimed in view of the teachings of Amamori so as to provide an airbag that can rapidly complete the inflation even when the output of the inflator is relatively small and that can promptly receive the occupant so as to properly protect the occupant (Amamori: Summary of the Invention), as well as to provide the airbag with a desired configuration when inflated that will allow for maximum protection for riders who vary in size, weight, height, and position.

***Allowable Subject Matter***

4. Claims 1-3, 5-12, 15, and 24 are allowed.
5. Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter: the allowable subject matter in claim 1 is the inflation control device spaced upwardly from the retainer to extend thereover upon airbag inflation, in combination with other features of claim 1;  
  
the allowable subject matter in claim 18 is restricting the size of the inflated airbag in a lateral direction transverse to both the upward direction and the forward and rearward direction, in combination with other features of claim 18 and the preceding claims.



***Response to Arguments***

7. Applicant's arguments filed 27 December 2006 have been fully considered but they are not persuasive.

With respect to the Hosono et al. reference, the airbag mounted to the motorcycle and deployed in front of the seat and in front of the rider of the motorcycle is suitable for restraining the rider during various types of collisions, including one in which a pitching motion of the motorcycle occurs, based on the location of the airbag in front of the rider. In addition, the entire airbag, and in particular the distal end (top end) and rear side (side facing the rider), is utilized in restraining the rider during the various types of collisions.


With respect to the Amamori reference, the airbag does indeed extend further in the upward and downward direction than it does in the forward and rearward direction, as can be seen in figure 1. Further, the front connection and the retainer front side are indeed spaced **approximately equal** to the spacing between the rear connection and the retainer rear side, as claimed, and can be seen in figure 1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura B. Freedman whose telephone number is (571) 272-6674. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Laura B Freedman  
Patent Examiner  
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LBF

 2/26/07  
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